CRAFTSMAN

handbook of circular saw blades and power tool accessories

CRAFTSMAN

REG. TRADEMARK

HANDBOOK OF CIRCULAR SAW BLADES AND POWER TOOL ACCESSORIES

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SEARS GUARANTEE

Craftsman tools are unconditionally guaranteed to be free from defects in materials or workmanship. Any tool that fails to give you complete satisfaction will be replaced free of charge.

FOR QUALITY WORK USE CRAFTSMAN TOOLS

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THERE'S A CRAFTSMAN SAW BLADE FOR EVERY JOB

Whatever your cutting requirements the broad line of quality Craftsman Kromedge Circular Blades can meet them. Craftsman Kromedge blades stay sharp longer, resist rust and gum build-up, and cut smoother than ordinary steel blades. They are made of the finest chrome nickel-molybdenum saw steel and are Kromedge treated to increase the hardness of the surface and cutting edges. Available in all popular diameters and arbors. Blades are provided with center hole knockout. Pry out smaller bushing with screwdriver if necessary to fit your arbor.

CHISEL TOOTH COMBINATION — All purpose blade. For fast cutting of all woods . . . ripping, crosscutting, and mitering. Excellent contractor's framing blade. Recommended especially for use with power hand saws, radial-arm saws and bench saws.

CABINET COMBINATION — For general cabinetwork. Rips, crosscuts, and miters hard and soft woods. For trim and finish work. This blade can be used on power hand, bench, and radial-arm saws.

PLYTOOTH BLADE — For smooth cutting of plywood, plus crosscutting and mitering all hard and soft wood. Use for squaring, trimming — excellent for cutting celotex and other wood fiber materials. For power hand, bench and radial-arm saws.

MASONITE SIDING BLADE — Especially made for cutting Masonite siding, decorative hardboard, and waterproof plywood. Kromedge treated blade with flame-hardened teeth — outlasts ordinary steel saw blades many times. For all electric hand, bench, and radial-arm saws.

FOR METAL SAWING, CHOOSE THE RIGHT BLADES

STEEL SLICER BLADES MUST ALWAYS EXTEND BEYOND WORK

Radial-Arm Saw

Bench Saw

Power Hand Saw

CUT SHEET METAL, ROOFING, GUTTERING, PIPE

KROMEDGE METAL CUTTING BLADES

STEEL SLICER — cuts sheet iron and steel by burning the material with heat generated by friction of the edge of the blade. For electric hand, bench, and radial-arm saws. This cutting process produces sparks. SAFETY GLASSES SHOULD BE WORN TO PROTECT YOUR EYES. The Steel Slicer is not recommended for cutting aluminum, copper, brass, and other non-ferrous metals.

NON-FERROUS METAL CUTTING BLADE — For cutting aluminum, brass, bronze, copper, zinc and other non-ferrous metals. A professional blade, taper-ground, made of extra-hard alloy steel. For best results use a lubricant, such as a tallow candle. Moderate feeding rate of material to blade will produce smooth cut. For power hand, bench, and radial-arm saws. ALWAYS WEAR SAFETY GLASSES TO PROTECT YOUR EYES.

NAIL-CUTTING BLADE — Ideal for flooring, lumber salvage, and rough timber that may contain an occasional nail or wire. Rip or crosscut. Made of extra-hard alloy steel . . . outlasts ordinary wood-sawing blades. Use with power hand, bench, and radial-arm saws.

SAFETY GLASSES ARE GOOD INSURANCE

PROFESSIONAL CABINETMAKER'S BLADES

For The Home-Workshop and Master Craftsman

Craftsman Kromedge Free-Cut blades have been developed to meet the exacting needs of master craftsmen. They are made to the most rigid manufacturing standards. Made in all popular diameters to fit electric hand, bench, and radial-arm saws.

FREE-CUT RIP BLADE — For clean, faster cutting of all solid woods with the grain. Binding is practically eliminated. Extra deep gullets between the teeth remove sawdust so that each tooth has a free path for cutting. Used also for re-sawing. Cuts both hard and soft woods. Free Cut blades have a heavy hub for greater stability — minimized vibration and wobble. Taper ground for extra cutting clearance, with teeth set for fast, free, and accurate cutting.

FREE-CUT COMBINATION BLADE — Crosscuts, rips or miters hard and soft woods, trims stock, etc. Taper Ground and set — a great improvement over the popular flat ground combination. Cuts without binding — cuts cleaner, faster, more accurately. Leaves a smooth square cut. Heavy center minimizes vibration and wobble.

UNPLUG MOTOR WHEN CHANGING BLADES

TWO-SIZE PUSH STICK

The handiest "extra" you can have at the circular saw table is the simple push stick. You can safely handle stock in a wide range of thicknesses by having two notches in the end instead of the usual one. Make one notch for handling stock up to ¼" thick. Turn the stick over and you have a ½" notch for stock up to 2" thick.

KEEP HANDS AWAY FROM CUTTING TOOLS

PROFESSIONAL CABINETMAKER'S BLADES

CRAFTSMAN THIN-RIM BLADES — The two Craftsman Thin-Rim blades are made especially for fine finish work. Taper ground with extra heavy body for stability. Teeth need no set. Kromedge treated for longer life; to resist tars, pitch, rust. Practically no splintering

FREE-SMOOTH CUT COMBINATION BLADE — Our finest professional combination blade. Makes precision "glue-joint" cuts — rip, crosscut, miter. Extra-heavy center makes blade run truer. Expansion holes and slots insure free, true, quiet operation, even when cutting hard, tough woods or plastics. Leaves a smooth square cut.

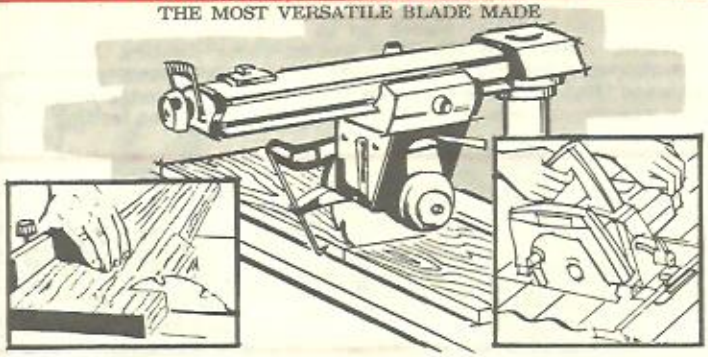
THIN-RIM SATIN-CUT VENEER BLADE — Best blade for precision cutting of plywood, veneers and other sensitive materials without splintering. Use also for mitering and cutting laminates, plastics. For extra fine sawing. Blades for power hand, bench, and radial-arm saws.

THIN-RIM SATIN-CUT COMBINATION BLADE — An ideal cabinetmaker's blade for use on solid woods — all fine trim and finish work. Rips, crosscuts, miters. Extra heavy body for stability — thin rim for smooth finish cuts. Available in diameters to fit power hand, bench, and radial-arm saws.

8-IN. KROMEDGE TENONING BLADE — Thicker than all-purpose blades. Cuts square bottom grooves ⅛-in. wide in one cut . . . assures hair-line joints. Especially useful in making box joints, mortises, splines, tenons, etc. Use on any radial-arm or bench saw with ⅝-½-in. arbor. For best results on bench saw use with Craftsman Universal Jig fixture (page 25). Use on all woods.

CRAFTSMAN CARBIDE TIPPED BLADE

THE MOST VERSATILE BLADE MADE



Composition Board	**Woodrock**	**Asphalt Roofing**
Masonite	**Transite**	**All kinds of wood**
Flake Board	**Cement Board**	**Formica**
Gypsum Board	**Asbestos Board**	**Fiberglass Cork**
Wallboard	**Asbestos Siding**	**Asbestos Installation**
Linoleum	**Asphalt Tile**	**Non-ferrous Metals**

FOLLOW THESE DIRECTIONS FOR YOUR OWN SAFETY, AND FOR BEST POSSIBLE RESULTS!

- Be sure that your machine is in perfect condition free from end and bearing play.
- Saw blade must run true on mandrel and in perfect line with fence or saw guide.
- For truest, smoothest cuts and longest cutting life use Craftsman Saw Stabilizers.
- SAFETY GLASSES SHOULD BE WORN TO PROTECT YOUR EYES.

Tungsten carbide is the hardest, most abrasive material ever used in saws, but it can be broken. Protect carbide tips from sharp blows.

With proper use and care, your Craftsman Carbide-Tipped Saw Blade will give you many times the life of conventional blades between sharpenings. Prompt resharpening and repair service is available through any SEARS retail or mail order store.

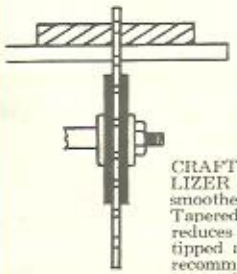
CAUTION: DO NOT USE ON NAILS, IRON OR STEEL and other ferrous materials. DO NOT USE ON MASONRY, CONCRETE, STONE, BRICK, FLAGSTONES, CERAMIC TILE, ETC.

CRAFTSMAN CARBIDE-TIPPED BLADES

Outlast ordinary steel blades up to 20 times. Use them to rip, crosscut, miter, and bevel all woods, most plastics, Masonite, Formica, aluminum, brass, transite, asphalt, asbestos, wallboard, plywood. **Not for masonry or ferrous metals.** Kromedge finish for rust resistance, less gumming, faster cutting, easier feeding . . . use less power.

8-TOOTH CARBIDE - TIPPED BLADE SAFE SAW — Excellent for contractors' use on-site and for home owners who do a lot of sawing. Gives many more cuts between blade changes than ordinary blades, cutting almost any material. Blade sizes for electric hand, bench, and radial-arm saws. (12-in. diameter blade has 12 teeth.)

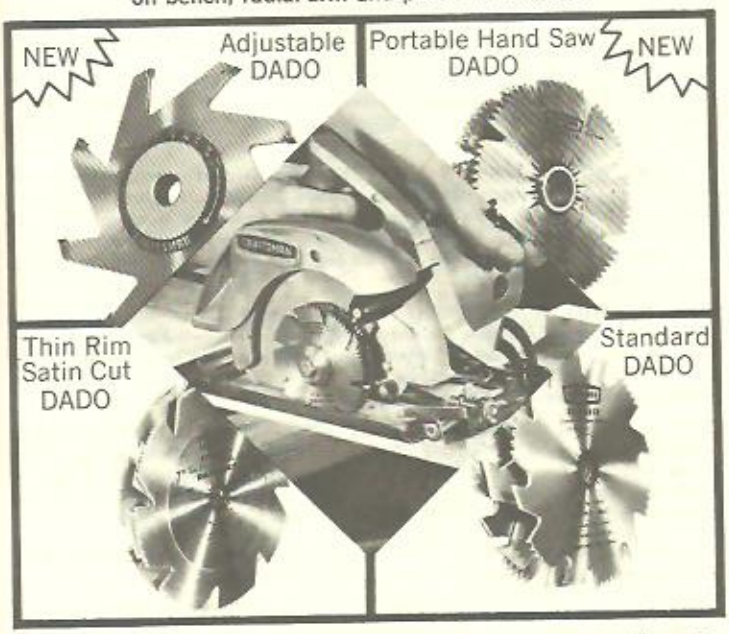
MASONITE CARBIDE-TIPPED BLADE — Make fast straight cuts with this long-lasting industrial quality blade. Designed for smooth cutting of Masonite and other similar abrasive materials. Blades have alternate top-bevel grind — recommended for all crosscutting and mitering of hard and soft woods, plywoods, veneers, Celotex, plastics, Formica and plastic laminates.



CRAFTSMAN SAW BLADE STABILIZER — Reduces wobble for truer, smoother cuts, and longer blade life. Tapered steel disc stabilizes the blade, reduces rim vibration. Ideal for carbide-tipped and all flat ground blades. Not recommended for hollow-ground or free-cut style blades. Stabilizers are 4 in. diameter with center hole bushed for ⅝-1½ in. Use with 7 in., 8 in., 9 in., 10 in. and larger diameter blades.

CRAFTSMAN KROMEDGE DADO SETS

For grooving, dadoing, ploughing, tenoning and decorative cutting on bench, radial-arm and power hand saws



The most common use of the dado is for cutting grooves: across the grain, diagonally, and with the grain. Craftsman Dado Sets are available to make cuts from ⅛ in. up to 1⅜ in. wide. The dado is a work-saver in making wide tenons for lap joints, rabbets for dado and rabbet joints, box or drawer joints, decorative cuts, etc.

Craftsman Dado Sets are Kromedge treated and will outlast ordinary dado sets 5 to 1. Sets are professional quality with precision ground blades and perfectly matched chippers. Dado sets are available to fit most popular bench, radial-arm, and power hand saws. For plywood, fine veneers, mosaics, and other sensitive materials we recommend the Thin-Rim Satin-Cut Dado Set illustrated.

CRAFTSMAN DADO SETS

CRAFTSMAN DADO SETS are precision manufactured from the finest saw steel. Craftsman sets are available to perform almost any type of grooving, for various materials, and to fit most popular radial saws, bench saws, and power hand saws.

The THIN RIM SATIN CUT DADO SETS are designed especially for smooth accurate splinter free cuts on plywood, veneers, laminates, furniture woods, and hard and soft wood. These sets are Kromedge treated for maximum life and rust-resistance. The dado for the master craftsman, furniture and cabinet maker. Available in 6" and 7" diameter, fits all bench and radial saws with 5/8" arbor, cuts grooves up to 13/16" width.

The THIN RIM SATIN CUT POWER HAND SAW DADO, new and exclusive for Sears, makes dado cuts formerly only possible on radial and bench saws. This dado set will fit most 5/8" arbor power hand saws and is Kromedge treated for maximum life and rust resistance, cuts grooves up to 9/16" width. It will make your power hand saw more versatile.

The conventional CRAFTSMAN FLAT GROUND KROMEDGE DADO is designed for heavy duty dadoing of all kinds. The cutting teeth are alternately blocked to give free and accurate cuts without binding. Available in 6" and 8" diameter, fits all bench and radial arm saws with 5/8" arbor. The 6" set cuts grooves up to 13/16" width, the 8" set cuts grooves up to 1 1/8" widths.

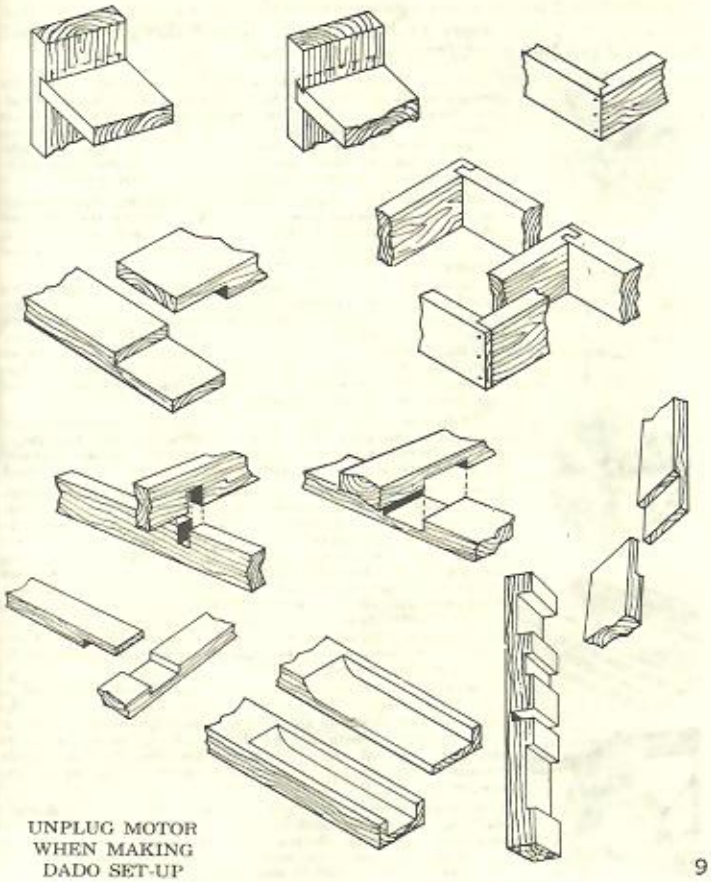
The full 1 1/8" cut with the 8" dado requires saw arbor length of at least 1 1/8" plus the arbor nut thickness. (Approximately 1 1/2" total.)

The CRAFTSMAN CARBIDE TIPPED 7" ADJUSTABLE DADO is new and exclusive with Sears. This dado fits all bench and radial arm saws with 5/8" or 3/4" arbors. The long lasting tungsten carbide tips will last up to 20 times as long as steel dado blades. Cuts plastic, formica, plywood and all hard and soft woods. The width of the groove is adjustable from 1/4" to 13/16" by DIAL THE CUT. It is not necessary to remove the dado from the machine to change the width of cut.

See following pages for "how to use" information and typical dado uses.

PURCHASE YOUR DADO SET AT SEARS. SATISFACTION GUARANTEED.

DADO CUTS AND JOINTS



UNPLUG MOTOR WHEN MAKING DADO SET-UP

HOW TO USE THE DADO

HOW TO USE THE DADO — Craftsman Dado Sets are designed and manufactured to fill exacting requirements. As with other precision tools, correct use leads to best results. The following steps will help you get the most from your dado set.

A

1. *Setting the Dado Head* — Select the correct parts for desired width of cut. For ⅛ in. width groove, use one outside cutter alone. For ¼ in. width groove use two outside cutters. For grooves wider than ¼ in. add enough inside chippers to make desired width of cut. Use paper or cardboard washers to make fine adjustments. *Always use chippers positioned between outside cutters — never alone.*

B

2. *Mounting the Dado* — Start by placing one outside cutter next to inside saw flange. When using the two outside cutters without a chipper, stagger teeth as shown in Photo A, so that the teeth of one cutter do not touch and damage the teeth of the other cutter.

3. *Arranging Inside Chippers* — When inside chippers are used between the outside cutters, be sure the cutting edges of the inside chippers are in line with the bottom of the gullet of the outside cutters as shown in Photo B. Maintain this position while tightening dado on saw arbor. When using more than one inside chipper, space the cutting edges of the chippers evenly, as shown. This equalizes the cutting load and makes a smoother cut.

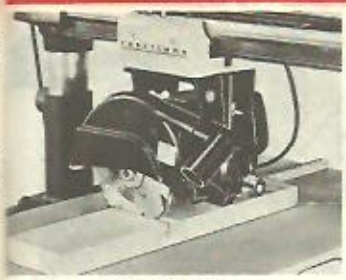
C

4. *Adjusting Width of Cut* — For large adjustments add or remove chippers. For fine adjustments use thin paper washers between the outside blades and the inside chippers. When chippers are used, both outside cutters must be used.

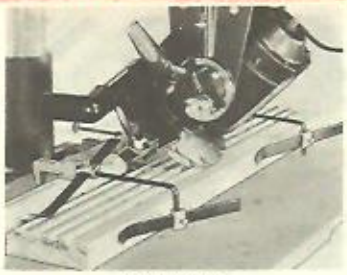
5. *Securing the Assembly* — Photo C shows complete assembly. Check rotation arrows on outside cutters, to make sure dado head is in correct rotating position. Be sure the arbor nut is tightened securely. If arbor is of sufficient length, use the outside flange. If the arbor is not long enough, it is standard practice to leave off the outside flange in order to obtain maximum thread for the nut. *Always Install Dado Insert on Bench Saw and Blade Guard on the Radial-Arm Saw.* Rotate the dado one full turn by hand before turning on machine to be sure the dado turns freely and does not strike against any part of the table, insert, guard, or motor housing.

6. *Making the Cut* — Operate the dado head the same as you do a circular saw blade. Position head to obtain the depth of cut desired. Check your settings with a piece of scrap lumber. When making deep cuts, do so in successive steps to prevent overloading of machine and to obtain smoother cuts. Feed at moderate speed — the wider and deeper the cut, the slower the speed.

It's simple to make straight dado and rabbet cuts, do angle dadoing, ploughing; also to make bevel, tongue-and-groove, tenoning, grooving, fluting cuts. In making heavy cuts on a radial-arm saw — be sure you *push* the dado over the work rather than pull it and *always use blade guard.*

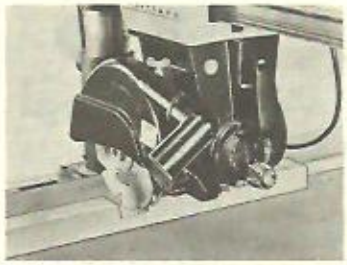


DADO CUT



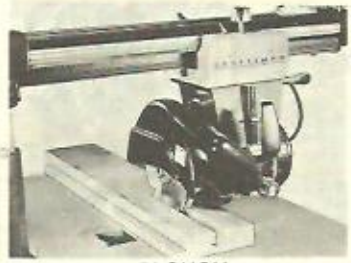
FLUTING

GAIN CUT



LAP

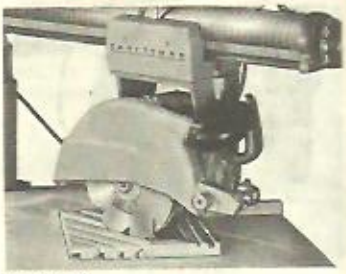
RABBET



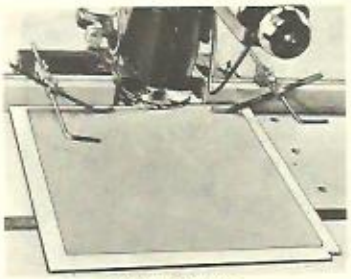
PLOUGH

ALWAYS USE BLADE OR MOLDING GUARD

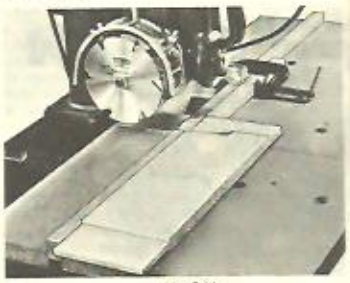
HOW TO USE THE DADO



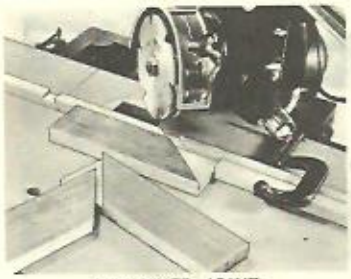
ORNAMENTAL CUTS



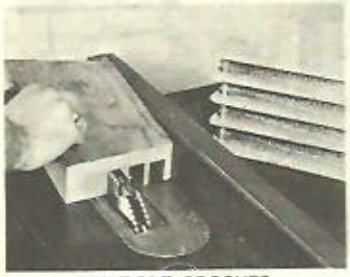
DOOR PANEL



TENON

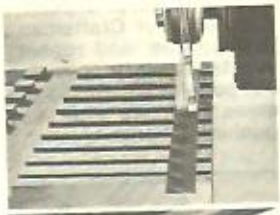


LAP-MITER JOINT



MULTIPLE GROOVES

CRAFTSMAN ADJUSTABLE CARBIDE-TIPPED DADO



USE DADO INSERT ON BENCH SAW

Just dial the hub for exact-size laps, grooves, joints, rabbets, other cuts

The Craftsman Carbide Tipped Adjustable Dado for radial-arm and bench saws will dado, plough, or rabbet any width from ¼ in. up to $1\frac{13}{16}$ in. Simply dial the width of groove desired. Once the dado is set, the cut will not vary. No need to remove dado from machine to reset for new width cut.

Depth of cut is normally limited only by the machine used. The maximum depth of cut is 2 inches. Fits any bench or radial-arm saw capable of using 7-inch or larger blade.

Long-lasting carbide tips are face bevel ground and permanently brazed to blade. Cut plastics, Formica, plywood and all solid woods.

How To Install the Adjustable Dado

Mount the Adjustable Dado on a radial-arm or bench saw the same way as a circular saw blade. Bushing is furnished for use on ⅝-in.-round arbors. Place bushing on arbor next to the arbor flange and position the dado. Check arrow for correct direction of rotation. Mount the outside saw flange and follow with the arbor nut, but do not tighten. If the arbor is not of sufficient length to admit the flange, place the arbor nut directly next to the dado head, omitting flange.

Dial the outer hub to the width of cut desired. Any desired width of cut between ¼ in. and $1\frac{13}{16}$ in. can be dialed. Select width to make joint fit either loose or tight, depending on type of joint required. Tighten arbor nut after setting desired width of cut.

Install dado insert on bench saw, or blade guard on radial-arm saw. Rotate the dado one full turn by hand before turning on machine to be sure the dado turns freely and does not strike against any part of the table, insert, guard, or motor housing.

To make a change in width of cut, loosen arbor nut, dial the outer hub to width desired, and re-tighten arbor nut. Always rotate by hand to check clearance; and check each new setting on scrap wood before cutting your work piece.

For the smoothest cut and safest operation, use the hold-down or Universal Jig described on pages 22 to 25. Observe all safety rules as practiced with conventional dado head, molding head, and saw blades.

SPECIAL DADO SET FOR ELECTRIC HAND SAWS

Use your electric hand saw with this specially designed Craftsman dado. Cut grooves up to 9/16-in. wide and up to 1-in. deep, depending on the machine used. (About 9/16 in. deep on your Craftsman Electric Hand Saw.) Make wide tenons for lap, dado, and rabbet joints; plough, bevel, and make decorative cuts formerly possible only on bench and radial-arm saws. Fits most popular electric hand saws with 5/8-in. round arbor. Dado set comes complete with two outside cutters, three chippers, necessary bushings, flange washer, and arbor screws.

Mounting — Always use a bushing, selecting correct bushing for desired width of cut. Place desired assembly on saw arbor, making sure the bushing extends into the recess of the flange washer. For 1/8-in.-width groove, use the shortest bushing and one outside cutter as in Photo A. Place on machine as you would a circular saw blade.

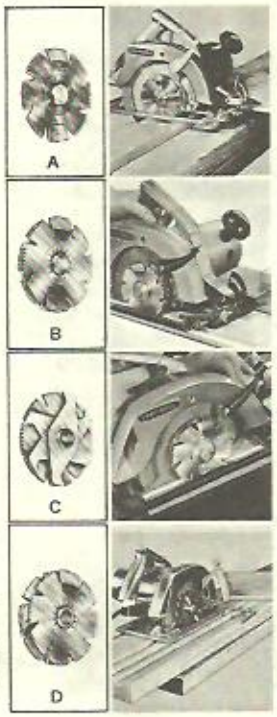
To make a 1/4-in.-wide groove, use next larger bushing and the two outside cutters as in Photo B. Rotate these cutters as shown, so that the teeth of one cutter does not touch and damage the teeth of the other cutter.

For grooves wider than 1/4 in., place largest bushing on saw arbor and add enough inside chippers to make desired width of cut. As shown in Photo C, position the cutting edges of the inside chippers so that they are evenly spaced. This equalizes the cutting load and makes a smoother cut.

USE CHIPPERS ONLY BETWEEN TWO OUTSIDE CUTTERS! Photo D shows complete assembly. After mounting outside blades, add flange washer, then tighten the arbor screw securely. Before starting machine, be sure the dado is installed in the correct rotating direction and clears all parts of the machine.

To adjust depth of cut, raise or lower the base plate the same as you do when using a circular saw blade.

Cutting — The dado operates the same way as your circular saw blade. Do not feed too fast. The wider and deeper the groove, the slower you push the machine. Do not twist or bind the dado. We strongly recommend that you use the Craftsman Portable Saw Guide or a straight edge to insure straight cuts. Check your settings by making a cut on scrap lumber.



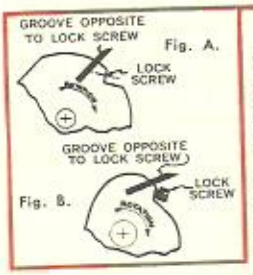
CRAFTSMAN MOLDING HEAD AND CUTTER BITS

Make Your Own Moldings and Trim

Convert your bench or radial-arm saw to a jointer, planer, or shaper with the Craftsman Molding Cutter Head. Make picture frames, interior trim, moldings, etc. Copy a variety of designs or create your own. Each cutter bit is made of selected tool steel, and properly heat treated for maximum toughness and long life. Patented Safety Screw Lock aligns cutter bits and locks them securely in position. Each set comes complete with wrench, spacer washer, and bushings in a sturdy plastic package.

The Craftsman Mono-Cutter Molding Head Set. Made especially for the Craftsman Radial-Arm Saw, but fits any bench or radial-arm saw with 1/2-in. or 5/8-in. arbor. Comes with 18 bits. Operates chatter-free and is designed to stay in perfect alignment — turns out trim or moldings uniform in size and shape.

Three-Bit Cutterhead Set. Our best, most efficient cutter head. Get professional results. Use your bench or radial-arm saw as a jointer-planer or shaper. Packaged in plastic case with storage space for six sets of cutter bits. Wrench, spacer washer, bushings included. Fits most bench and radial-arm saws with 1/2 in., 5/8 in., or 3/4 in. round arbors.



INSERTING CUTTERS IN MOLDING HEAD. Insert the cutter bit into your Craftsman molding head as shown in Figs. A and B and tighten the Safety Lock Screws with wrench provided. Be sure cutters are seated squarely and lock screws tightened securely before starting saw.

CAUTION: Be sure the groove in back side of cutter bit is opposite the lock screw and that the rotation is correct. Running the molding head backwards or with bits installed backwards will permanently damage the bits and head.

MOUNTING MOLDING HEAD ON BENCH SAW ARBOR. Always use a molding head table insert. If bushing is needed, it goes on saw arbor first. Next slip spacer washer on the bushing or arbor shaft. Then slip on molding head as shown in Figs. C. If your molding head has recessed flange, place solid side next to arbor flange. Slide head into place with cutters pointing in the direction of rotation. Replace outside flange washer and nut. Tighten the saw arbor nut securely. Before starting machine, revolve the head by hand to be sure it does not touch or bind on any part of the table, or insert. It is not necessary to remove head to insert other cutter shapes. However, unplug the saw or otherwise make sure that the power cannot accidentally be turned on while you are making cutter changes.

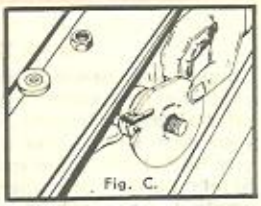


Fig. C.

MOUNTING MOLDING HEAD ON RADIAL-ARM SAW. If bushing is required, it should go on arbor first. Then place spacer washer over the bushing or arbor, then the molding head as in Figs. D and E. If space permits, use both flange washers on the machine spindle. Be sure the cutter bit is pointing in the direction of rotation. Tighten the arbor nut securely and replace blade guard. Before starting machine, revolve the head by hand to see that it is free and does not bind or strike anything. It is not necessary to remove the head to change cutter bits. However, first unplug the machine or otherwise make sure it cannot be turned on accidentally.

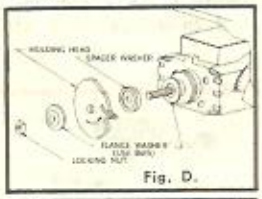


Fig. D.

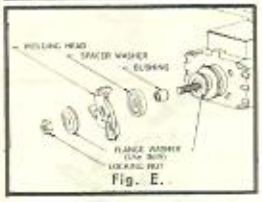


Fig. E.

HELPFUL HINTS FOR MOLDING CUTTER AND DADO OPERATION

1. Never operate molding head on bench saw without molding head insert.
2. Use wood auxiliary fence, pages 17 and 22, instead of metal rip fence.
3. Whenever possible use at least a 4-in.-wide board and then rip to desired width after making molding cut.
4. Use Craftsman Universal Jig, page 25, on all strips shorter than 12 in.
5. Never turn on power until you revolve the molding head by hand to be sure the cutters are tight and the head is running true.
6. Feed material into the molding cutters slowly and steadily for smooth, even cuts.
7. On large moldings, take two or three shallow cuts rather than one deep cut.
8. Remember that the best work requires sharp cutters.
9. Never stop being careful.
10. Always oil your molding head cutters before storing.

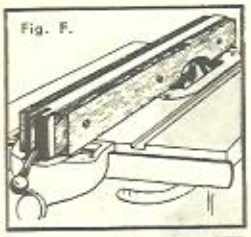


Fig. F.

MAKING AN AUXILIARY FENCE. If you do not have a molding head auxiliary fence like the one illustrated in Fig. F, you can easily adapt your regular fence to molding operations.

Make two 1-in.-thick facings to fit your fence. Straight-grained hardwood is best. Cut a semi-circular notch in the bottom edge of the facing for cutter clearance. Prepare the other facing in like manner and mount the two facings on opposite sides of your fence with countersunk bolts and nuts. For additional detailed instructions see page 23.

MAKING YOUR OWN HOLD-DOWNS. Any device that holds the work against the fence or saw table is called a "hold-down." The hold-down and guide illustrated in Fig. G is an adjustable device for the various widths and thicknesses of material. It supports the work at all times against the impact of the cutter. Some form of hold-down should be used wherever possible.

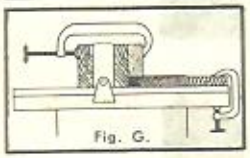


Fig. G.

Fig. H shows a type of hold-down for use in making edge cuts on wide boards where it is difficult to control the depth of cut. The strip of wood clamped on the work slides on the auxiliary fence and controls the depth of cut. On all cuts, be sure to turn the head by hand to make sure the cutters do not strike the table saw bed, or insert.

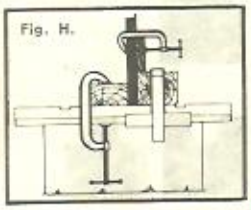


Fig. H.

A guide or hold-down like the one shown in Fig. I is best for strip holding. The groove is just large enough to hold the strip securely as it is fed. If you do not use a stripping guide, cut the moldings on wood at least 4 inches wide, using hold-down and guide as in Fig. G, then cut off strips the desired width

See the Craftsman Hold-Down for bench and radial-arm saws and jointers on page 22.

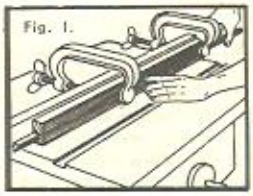


Fig. I.

USING THE CUTTER FOR VARIOUS MOLDING JOBS. With certain exceptions, feed the work as you would to a saw blade. Avoid making too deep a cut or cutting too fast. Make your deep cuts in easy stages, raising the molding head a little at a time. Always use the fence as a guide. When work must be placed on edge, move the fence back so that cutting is done on the side away from the fence. This leaves a square edge against the fence for better support. Be sure the work faced against the fence is straight; otherwise the cut will not be true. If work is to be molded all around, make the cross-grain cuts first — preferably with a backup of scrap wood, to minimize splintering. The rip cuts will then remove any slight splinters that may occur from the cross-cuts.

CRAFTSMAN CUTTER SHAPES

9-3211
Window Sash

9-3201
Glue joint

9-3206
1 in. flute (½ in. radius)

9-3212
5/16 in. cove and bead

9-3202
Ogee window and door stop

9-3207
5/16 in. quarter round; 5/16 in. cove (drop leaf)

9-2302
1 in. planer and jointer

9-3203
¼ in. flute and ½ in. cove

9-3208
3/16 in., 3/8 in. quarter round; ¼ in. bead

9-2353
Cabinet door lip

9-3204
90-degree flute

9-3209
⅜ in. cove

9-2303
Wedge-tongue and groove cutter set

9-2351
¼ in. and ½ in. quarter round

9-3205
Curved flute and 3/16 in. quarter round

9-2352
3-bead (¼ in. each)

9-2354
Clover leaf and screen mold

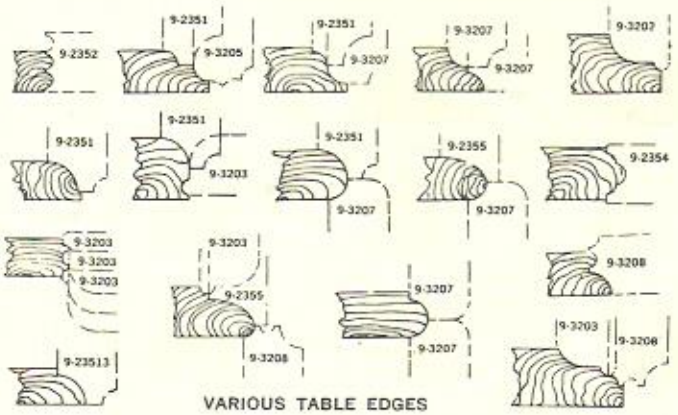
9-3210
Panel cupboard door

9-2355
Base molding

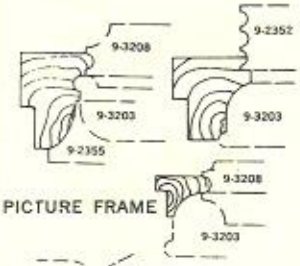
NOTE:
All cutter bits are made in sets of 3 for Three-Bit Molding Head, except the No. 9-2303 wedge-tongue and groove set, which is a six-bit set. When ordering single bits for Mono-Head add a numeral 3 to the part number.

CRAFTSMAN CUTTER SHAPES

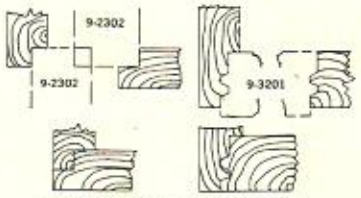
CUT COMBINATIONS WITH CRAFTSMAN MOLDING CUTTERS



VARIOUS TABLE EDGES

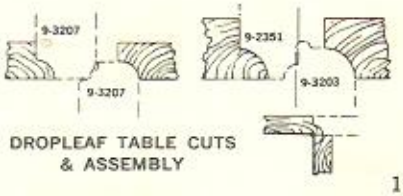


PICTURE FRAME



DRAWER & BOX CORNERS

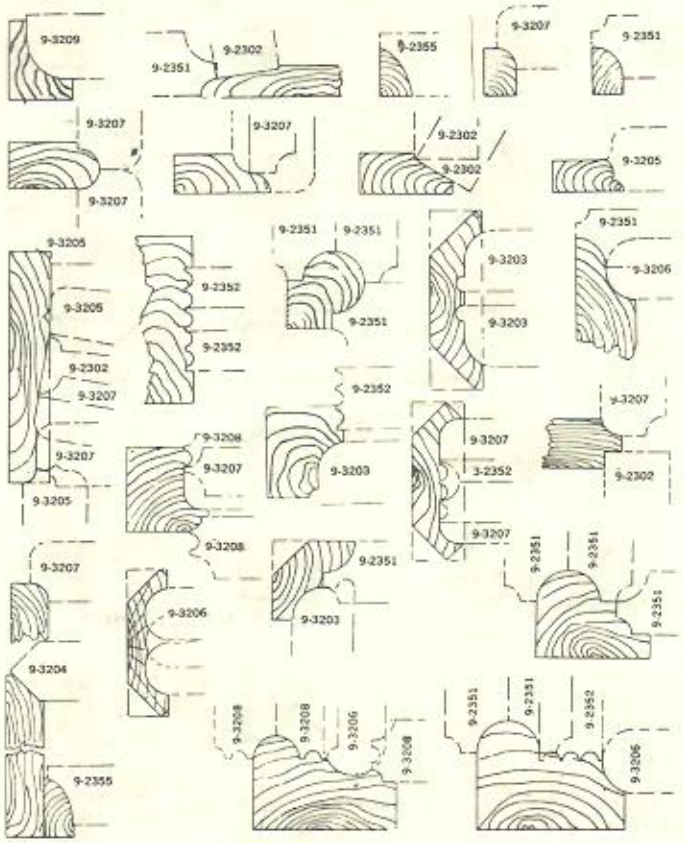
TRAY HANDLE



DROPLEAF TABLE CUTS & ASSEMBLY

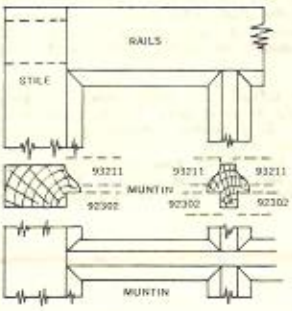
CRAFTSMAN CUTTER SHAPES

CUT COMBINATIONS WITH CRAFTSMAN MOLDING CUTTERS

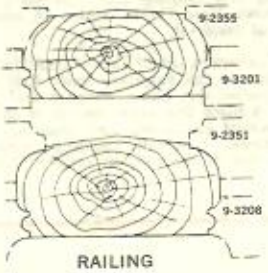


CRAFTSMAN CUTTER SHAPES

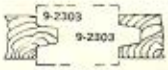
The possibilities are endless — just use your imagination.



WINDOWS



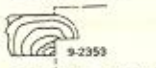
RAILING



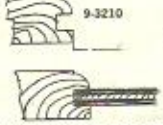
WEDGE

TONGUE & GROOVE

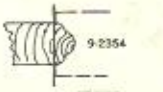
GLUE JOINT

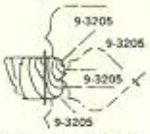


¾ CABINET DOOR

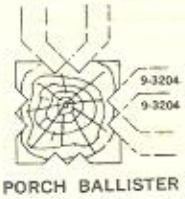


CUPBOARD DOOR



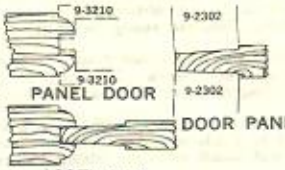


SCREEN MOLD



PORCH BALLISTER

⅜ CABINET DOOR



PANEL DOOR

DOOR PANEL

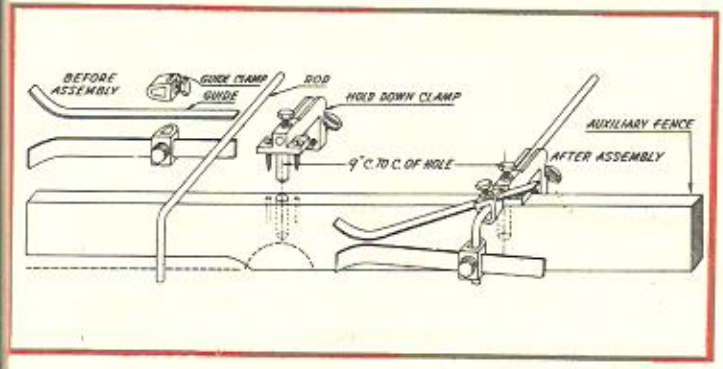
ASSEMBLY

BEST QUALITY, CLOSE TOLERANCE, RIGID INSPECTION, EQUALS CRAFTSMAN.

CRAFTSMAN HOLD-DOWNS

A satisfactory hold-down for any single job can be devised with boards and clamps as described on page 17. However, the man who makes a variety of molding and jointing cuts will want the time-saving convenience offered by the Craftsman Hold-Down, which is easily adjustable to many widths and thicknesses of material.

The Craftsman Hold-Down consists of four adjustable spring steel "fingers" attaching to the auxiliary fence that you apply to your saw. It fits most bench saws, radial-arm saws, shapers and jointers. It provides constant pressure on the work-piece the entire length of cut, to assure uniform contact with the cutters and prevent chattering and jumping. It also helps keep your hands away from the cutters. Use with molding cutter, dado, and tenoning blades. The photos show a few of the endless variety of uses on jointer, bench and radial-arm saws.



Construct an auxiliary fence for your tool as described on page 23. Assemble as shown in the illustration above. Mount the auxiliary fence on your saw or jointer. You are ready to position fingers to hold material being cut.

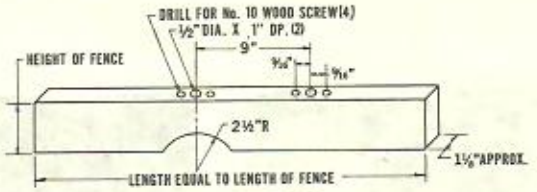
Usually the hold-down fingers are positioned to hold work firmly against table and auxiliary fence. However, in some cases, it is desirable to face all four steel fingers down to hold material against saw or jointer table.

Be sure the fingers holding material down are adjusted so that the pressure point of guide is not directly over table opening. Always adjust fingers so they will not touch edge of cutting tool when no material is being cut.

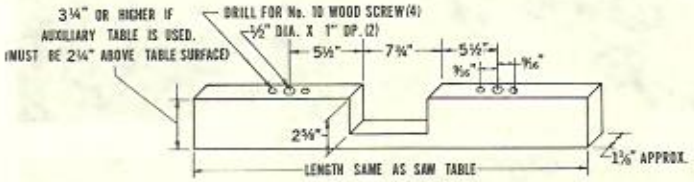
USE HOLD-DOWNS FOR SAFETY

CRAFTSMAN HOLD-DOWNS

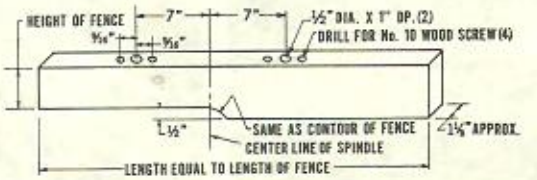
MAKE AN AUXILIARY FENCE FOR YOUR MACHINE — The Hold Down must be assembled on auxiliary wood fence that can be easily attached to the fence on your jointer or bench saw. Cut auxiliary fence from straight grained hard wood with a smooth finish. Length and height same as fence on your bench saw or jointer. Radial saw auxiliary fence should be 3¼" high. Thickness should be about 1⅛". The following sketches show how to make your auxiliary fence for Molding Heads and Dadoes. For use with saw blades the center cut-out must be larger.



FOR BENCH SAW

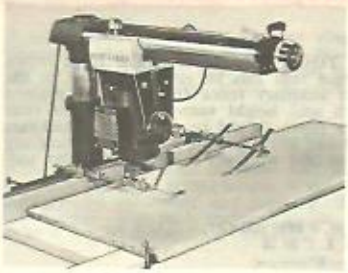


FOR RADIAL SAW



FOR JOINTER

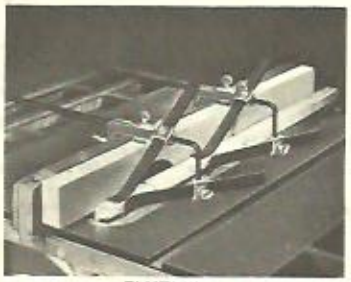
CRAFTSMAN HOLD-DOWNS



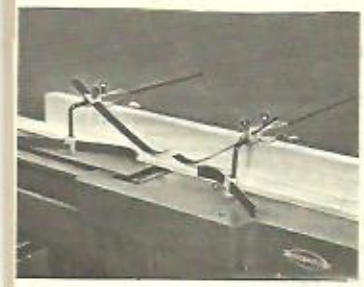
CABINET DOOR

RAISED DOOR PANEL

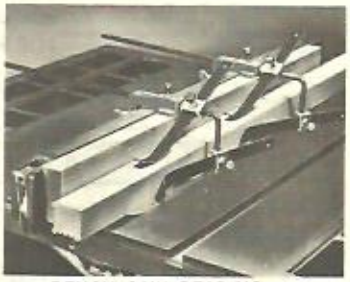
RADIAL SAW BEADING



FLUTING



JOINTER



BENCH SAW BEADING

CRAFTSMAN UNIVERSAL JIG FOR DIFFICULT CUTS

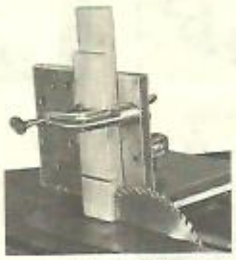
For Use on Bench Saw Tables and Shapers

The Universal Jig has been designed to safely hold material for making difficult cuts for wood jointing, tenoning, molding, dadoing, etc. This attachment slides in the miter slot on your saw table in the same position as the miter gauge. Fits all saws with ¾ in. miter slot. The positioning plate can be accurately positioned on the base by using the scale. By means of the different combinations of holes in the positioning plate, the locating guides and clamps can be adjusted to hold material in any desired position. Complete with two C Clamps, two locating guides and necessary clamping bolts and nuts. The Universal Jig is made of die cast aluminum. It is used with the 8 in. Kromedge Tenoning Blade, molding head cutters, and dados. The tenoning blade, shown on page 4, fits ⅝ in.-½ in. saw arbors. Thicker than general purpose blades, it cuts square bottom grooves ⅛ in. wide to form hairline joints.

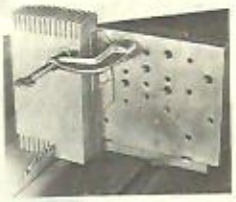
BASIC CUTS USED IN WOOD JOINTING WITH THE UNIVERSAL JIG

Following illustrations show how to make basic cuts simply and safely.

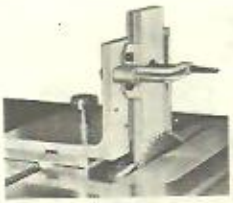
UNIVERSAL JIG



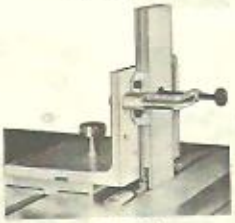
LAP JOINT



BOX JOINT



TENON



MORTISE

SPLINE

Scrapboard behind wood being cut keeps cutter away from Universal Jig

CRAFTSMAN UNIVERSAL JIG FOR DIFFICULT CUTS

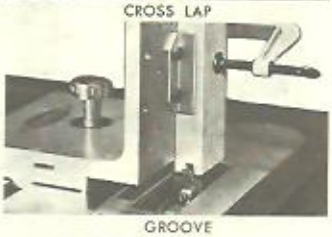
RABBET JOINT

CENTER LAP

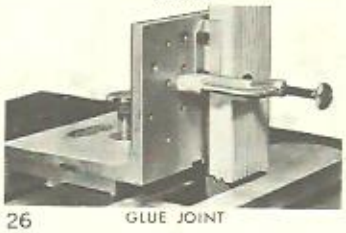
MORTISE

CROSS LAP

TONGUE



GROOVE



GLUE JOINT

DRAWER FRONT

CRAFTSMAN MITER VISE

- Make frames with perfect mitered corners.
- Make feather spline miters for extra-strong joints.
- Cut widths up to 3 in., any length pieces.
- Cut all wood, plus aluminum, plastics, laminates, etc.
- Fits all radial-arm saws.

MAKE YOUR OWN FRAMES AND SCREENS WITH PERFECT JOINTS

MITERING SCREEN FRAME

MITER VISE

MITERING PICTURE FRAME

FEATHER SPLINE

KARBO-GRIT ABRASIVE WHEEL

Saws, sands, grooves, shapes and dadoes without changing wheel. Actually 5-tools-in-1! Outlasts . . . outperforms sandpaper 40 to 1 . . . Cuts and sands in one operation. You can saw, groove, shape, dado, and plough without changing the wheel. Cuts and smooths all woods, plastics, Formica, plywood, plaster, composition, hardboard, fiberglass, laminates, etc. Easy to clean with wire brush or gum remover.

Tough carbide grits are permanently brazed to steel wheel — will not work loose. One side and edge coarse grit; other side medium grit. Safe in operation — no teeth to snag or drag.

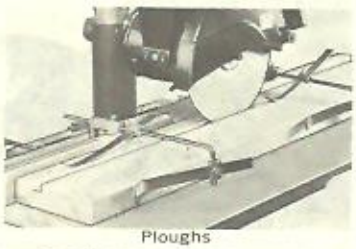
Operation:

Bench Saw. Mount as you would a circular saw blade. Operate as you would a disc sander. Saw, groove, shape and sand without changing wheels.

Radial Arm Saw: Mount as you would a circular saw blade. Operate as you would a disc sander. Saw, groove, shape and sand without changing wheels.

NOTE:
For surface sanding on radial arm saws, use the adapter hub as shown on Page 29 and rotate motor to vertical position as shown in the photo below and lock friction guide.

Grooves or shapes



Ploughs

Surface Sanding

Saws

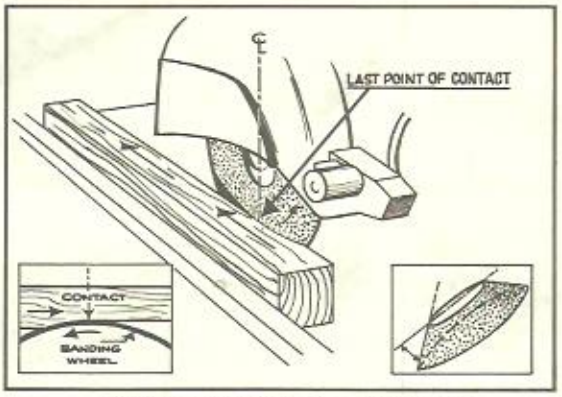
CRAFTSMAN JOINTER-SANDER

The JOINTER-SANDER is for the cabinet maker, furniture maker, the Craftsman that requires the finest in straight, smooth finishes.

Convert your bench or radial saw into a jointer-sander or disc sander. One side of the jointer-sander disc is conical shape for true straight line sanding. Other side is conventional flat disc sander for the sanding of curves, shapes, free hand sanding, etc.

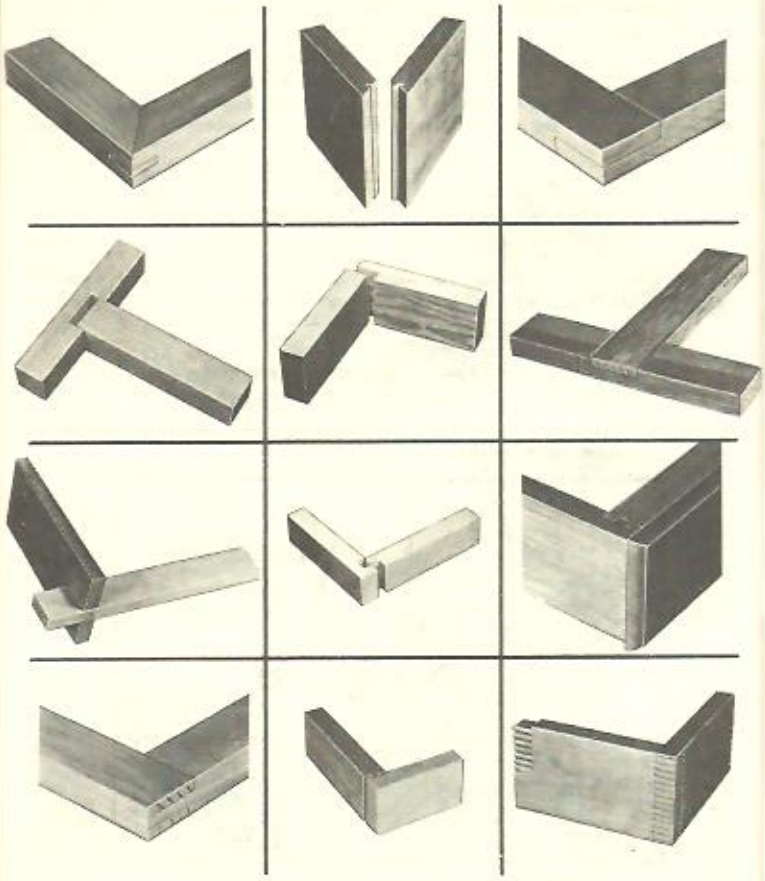
Sanded with jointer sander. All sanding marks are straight and parallel. Requires little if any additional hand sanding before applying finish.

Sanded with conventional sanding disc. Sanding marks are curved and overlapping. Requires hand sanding before applying finish.

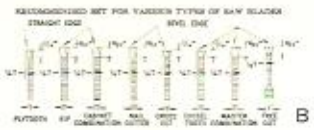


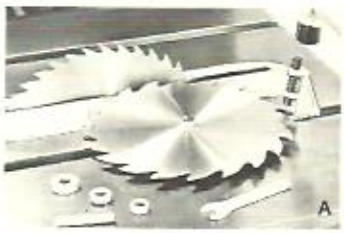
SMOOTHER SANDING — LONG LIFE WITH JOINTER-SANDER

TYPICAL WOOD JOINTS



REFITTING CIRCULAR SAW BLADES AND DADOES





Craftsman Circular Saw Blades are precision manufactured, properly tempered, set, and filed. To obtain best results it is necessary to resharpen occasionally when blade is dulled from prolonged usage.

SHARPENING OPERATIONS—Usually three separate steps are required: (1) Jointing, (2) Setting, (3) Filing. Jointing is re-grinding of the blade to a perfect circle. Setting is bending the tips, (only) of the teeth alternately right and left—so the teeth will cut a kerf slightly wider than the blade thickness, and allow the blade to run freely. Filing restores the proper edges, bevels and gullets.

JOINTING ON BENCH SAWS—Mount the blade on the arbor so that you can hand turn the blade backward. Lower the blade, place an oilstone on two blocks over table insert, and raise blade until the tips of teeth barely brush the stone. Rotate blade by hand until all teeth have touched the stone. Do not take off more metal than is necessary. When tops of teeth have "shine", jointing operation is finished. Similar procedure is followed on radial-arm saw, except that the blade is lowered to stone.

To joint a Dado Set, place the entire set on the arbor, and joint all cutters together.

UNPLUG MOTOR WHEN JOINTING BLADE

THE CRAFTSMAN CIRCULAR SAW SETTER, shown in Photo A, is designed for quick, accurate setting of blades with ½ in., ⅝ in., ¾ in., and 1 in. center hole. The tool consists of a steel anvil, zinc die-cast body and centering block, wrench, 4 bushings, and 2 striker pins (one for large teeth and one for fine teeth). Saw Setter fits into any bench saw miter slot ⅝ in. to ¾ in. in width.

In order to use the saw setter, the proper bushing to fit the circular saw arbor should be placed on the post of the centering block and the round head screw tightened securely. Place the unit in the miter slot of your saw table and turn each hex cap screw to the left until the unit is held tightly in the slot. Place the centering block the proper distance from the body so that each tooth extends under the striking pin for the proper depth of set, and lock in place. Diagram B shows recommended set for various type blades.

The teeth are set by tapping striker pin with a light hammer, using enough force to set tooth without damaging it. Rotate blade to set *every other tooth to one side*. Then turn blade over and set the remaining teeth.

When setting the Free-Cut Combination Blade, do not set raker teeth. Setting procedure for 6 in. Flat Ground Dado Sets differs in that you are bending groups of teeth; this is called blocking. Exercise caution to achieve the same set within each group or bank of teeth and the same set for all banks. For Craftsman 8 in. Dadoes, set teeth in alternate directions, same as chiseltooth combination blade. The teeth on the Thin Rim Satin Cut Dadoes and the *Free-Smooth Cut blades* do not require a set.

CIRCULAR SAW FILING

WITH A CRAFTSMAN SAW VISE:
The best guide for proper resharpening of a blade is to maintain the original tooth shape and file exactly in the same manner as originally filed; this includes the bevel angles, hook angles, and the back clearance angles on the saw teeth. File all teeth in Dado Set inside and outside cutters, until the shine from jointing is gone. Then file the Raker Teeth of the outside cutters and the inside cutters about three more even strokes. (This makes the side cutting teeth cut ahead of the bottom cutting teeth of the set.)

For convenience in filing and to protect blades, we suggest using the Craftsman Circular Saw Vise. Circular Saw Vise can be fitted in the miter slot of the saw table in the same manner as the saw setter or it can be mounted stationary on a home workshop bench. However, if you use a clamp or regular vise, always protect the blade by sandwiching between scrap pieces of wood.
The following chart gives the normal filing instructions and recommended files for use in resharpening your Craftsman blades. For best results, use Kromedge files.

Type of Blade	Filing Instructions		Recommended File
	Top of Teeth	Face of Tooth	
Chisel Tooth	Bevel Filed	Straight Filed	Mill File (Round edges) Round Bastard for gullets
Rip	Straight Filed or Low Bevel	Straight Filed	Mill File (round edges) for teeth Round Bastard for gullets
Cross Cut	Bevel Filed	Slightly Beveled	Slim Taper
Tenoning Blade	Straight Filed	Straight Filed	Slim Taper
Plytooth and Fine Tooth Blade	Bevel Filed	Slightly Beveled	Slim Taper
Cabinet Combination	Bevel Filed	Straight Filed	Slim Taper for teeth Round Bastard for gullets
Free Cut, Free-Smooth Cut, Master Combination, and Hollow Ground Combination*	Straight File Rakers Bevel Filed Cutting Teeth	Straight File Rakers Slightly Beveled Cutting Teeth	Round Bastard for gullets Slim Taper for cutting teeth Flat Bastard for raker teeth
Non-Ferrous	Straight Filed	Straight Filed	Slim Taper
Nail Cutter**	Bevel Filed	Straight Filed	Slim Taper Round Bastard for gullets

*The raker teeth must be filed 1/64 in. to 1/32 in. lower than the cutting teeth.
**The bevel angles are very important to the operation of the nail cutting blade. Be sure to maintain the original tooth shape.

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